

Claims

[c1] In an establishment having multiple rooms for temporary occupancy wherein each room has a doorway for access to a common access path to the rooms, a system for identification and monitoring of, and obtaining data including location and status data relating to, assets of the establishment including mobile property within the establishment or persons temporarily residing or working in the establishment, the system comprising: a wireless first communicator mounted in association with each room so as to be within a communication enabling proximity to the access path, at least one wireless interactive second communicator for use in association with an asset of the establishment, and wherein a plurality of said first communicators are thereby spaced apart along the access path to the rooms, and within said communication enabling proximity to the access path for communication between said first and second communicators, wherein each of said first communicators cooperates in wireless communication with each second communicator of said at least one wireless second communicator when said second communicator is in said communication enabling proximity to said each first communicator along

the access path.

- [c2] The apparatus of claim 1 wherein said second communicator is a wireless tag and wherein said each first communicator interacts in non-contact wireless communication with said tag so as to obtain unique data, unique to said tag.
- [c3] The apparatus of claim 2 further comprising at least one of room sensors or devices within each room having means for providing status information to said first communicator, wherein each said first communicator is associated with its own unique room and is adapted to be remotely interrogated by a second communicator communicating with said first communicator so as to obtain tag information from said unique data obtained from said tag, and said status information from room sensors or devices within each said room.
- [c4] The apparatus of claim 1 wherein said each first communicator communicates data to a central processor.
- [c5] The apparatus of claim 4 wherein said central processor has associated with it a central database.
- [c6] The apparatus of claim 4 wherein said processor includes an interrogator means for interrogating each said first communicator.

- [c7] The apparatus of claim 5 wherein said processor cooperates with said central database and communicates with said a plurality of said first communicators over a network so as to obtain data including up-to-date said unique data, ID data corresponding to said each first communicators so as to determine corresponding location data and unique tag ID data from a particular said tag when said tag is in the access path.
- [c8] The apparatus of claim 1 further comprising a central processor in communication with said plurality of first communicators, and wherein at least one sensor is mounted within the rooms and wherein each sensor of said at least one sensor communicates sensor data to at least one of said plurality of first communicators for communication of said sensor data from said first communicator to said processor.
- [c9] The apparatus of claim 8 wherein said at least one sensor includes at least one of a motion or heat sensor to detect occupancy of the corresponding room.
- [c10] The apparatus of claim 8 wherein said at least one sensor includes an environmental status sensor.
- [c11] The apparatus of claim 8 wherein said at least one sensor includes an appliance use sensor.

- [c12] The apparatus of claim 1 wherein said at least one second communicator is handheld.
- [c13] The apparatus of claim 1 further comprising at least one activity sensor within a room for generating activity data for that room, and wherein said first communicator is a hub means for channelling through said first communicator room said activity data corresponding to activity or lack of activity of an asset within the corresponding room.
- [c14] The apparatus of claim 13 wherein a networked communication means receives said activity data from said first communicator.
- [c15] The apparatus of claim 14 wherein said activity data is communicated to said processor from said networked communication means.
- [c16] The apparatus of claim 15 wherein said networked communication means includes a non-wireless network co-operating between said first communicator and said processor.
- [c17] The apparatus of claim 13 wherein said second communicator includes a handheld interrogator for downloading said activity data from said first communicator.

- [c18] The apparatus of claim 2 wherein said asset is mobile property within the establishment and said tag is adapted for mounting to said mobile property.
- [c19] The apparatus of claim 2 wherein said asset is a staff member of the establishment and said tag is adapted for mounting to said staff member.
- [c20] The apparatus of claim 19 wherein said tag is authorized and logged in to said processor for a pre-set time period.
- [c21] The apparatus of claim 20 wherein said time period corresponds to the length of a work-shift of said staff member.
- [c22] The apparatus of claim 4 wherein said processor includes means for tracking location of said assets within the establishment.
- [c23] The apparatus of claim 22 wherein said means for tracking includes means for creating and retaining a tracking history for said assets to track said location of said assets over time.
- [c24] The apparatus of claim 22 wherein said processor further includes means for verifying occupancy of a room from said status information and for generating occu-

pancy data.

- [c25] The apparatus of claim 24 wherein said processor further comprises means for comparing said occupancy data with a roster of registered guests so as to detect non-registered occupancy of a room within the establishment.
- [c26] The apparatus of claim 18 wherein said asset is a food tray.
- [c27] The apparatus of claim 18 wherein said asset is a shoe tray.
- [c28] The apparatus of claim 18 wherein said asset is luggage.
- [c29] The apparatus of claim 1 wherein said first communicator is mounted in a room number sign.
- [c30] The apparatus of claim 1 wherein said second communicator is a fob.
- [c31] The apparatus of claim 1 wherein said second communicator is a fob. The apparatus of claim 1 wherein said second communicator is a personal-digital-assistant.
- [c32] The apparatus of claim 13 wherein said second communicator is a handheld wireless activator for activating said first communicator to relay said activity data.

- [c33] The apparatus of claim 32 wherein said first communicator relays said activity data by displaying said activity data upon activation by said second communicator.
- [c34] The apparatus of claim 13 wherein said at least one activity sensor is a sensor indicating a bar fridge has been used.
- [c35] The apparatus of claim 13 wherein said at least one activity sensor is a motion detector.
- [c36] The apparatus of claim 13 wherein said at least one activity sensor communicates wirelessly with said first communicator whereby in each room sensors and devices may communicate wirelessly.
- [c37] The apparatus of claim 13 wherein said first communicator is a master switch unit.
- [c38] The apparatus of claim 1 wherein said second communicator is adapted for data entry into said first communicator.
- [c39] The apparatus of claim 1 wherein said second communicator is adapted for re-programming said first communicator.
- [c40] The apparatus of claim 22 wherein said processor in-

cludes means for detecting fraud wherein said assets are staff members of the establishments and wherein location data for said assets from said means for tracking location of said assets is compared to assigned work locations assigned to said staff members so as to detect vagrancy from or lack of progress within the assigned work locations.

- [c41] The apparatus of claim 22 wherein said assets are persons temporarily residing in the establishment and wherein said processor includes means for detecting fraud, wherein said means for detecting fraud compares location data for said assets from said means for tracking location of said assets with roster data indicating which rooms in the establishment have been rented so as to determine the location of any non-paying occupants of the rooms.
- [c42] The apparatus of claim 41 wherein said means for tracking location of said assets includes motion sensors in the rooms cooperating with said first communicator.
- [c43] The apparatus of claim 1 wherein said second communicator communicates to a user by audible braille.
- [c44] The apparatus of claim 43 wherein said first communicator is adapted for use by a blind user by retrofitting of a

tactile braille message strip onto said first communicator.